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GEOGRAPHICAL BOUNDARIES—I.*

BY

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Nature abhors fixed boundary lines and sudden transitions; all her forces combine against them. Everywhere she keeps her borders melting, wavering, advancing, retreating. If by some cataclysm sharp lines of demarcation are drawn, she straightway begins to blur them by creating intermediate forms, and thus establishes the boundary zone which characterizes the inanimate and animate world. A stratum of limestone or sandstone, when brought into contact with a glowing mass of igneous rock, undergoes various changes due to the penetrating heat of the volcanic outflow, so that its surface is metamorphosed as far as that heat reaches. The granite cliff slowly deposits at its base a rock-waste slope to soften the sudden transition from its perpendicular surface to the level plain at its feet. The line where a land-born river meets the sea tends to become a sandbar or a delta, created by the river-borne silt and the wash of the waves, a form intermediate between land and sea, bearing the stamp of each, fluid in its outlines, ever growing by the persistent accumulation of mud, though ever subject to inundation and destruction by the waters which made it. The alluvial coastal hems that edge all shallow seas are such border zones, reflecting in their flat, low surfaces the dead level of the ocean, in their composition the solid substance of the land; but in the miniature waves imprinted on the sands and the billows of heaped-up boulders, the master workman of the deep leaves his trademark.

* This article is a chapter from a work in preparation on the Influences of Geographic Environment, based upon Friedrich Ratzel's System of Anthropogeography.

Under examination, even our familiar term coastline proves to be only an abstraction with no corresponding reality in nature. Everywhere, whether on margin of lake or gulf, the actual phenomenon is a coast zone, alternately covered and abandoned by the waters, varying in width from a few inches to a few miles, according to the slope of the land, the range of the tide and the direction of the wind. It has one breadth at the minimum or neap tide, but increases often two or three fold at spring tide, when the distance between ebb and flood is at its maximum. At the mouth of Cook's Inlet on the southern Alaskan coast, where the range of tides is only eight feet, the zone is comparatively narrow, but widens rapidly towards the head of the inlet, where the tide rises twenty-three feet above the ebb line, and even to sixty-five feet under the influence of a heavy southwest storm. On flat coasts we are familiar with the wide frontier of salt marshes, that witness the border warfare of land and sea, alternate invasion and retreat. In low-shored estuaries like those of northern Brittany and northwestern Alaska, this amphibian girdle of the land expands to a width of four miles, while on the precipitous coasts of enclosed sea basins it contracts to a few inches. Hence this boundary zone changes with every impulse of the mobile sea and with every varying configuration of the shore. Movement and external conditions are the factors in its creation. They make something that is only partially akin to the two contiguous forms. Here on their outer margins land and ocean compromise their physical differences, and this by a law which runs through animate and inanimate nature. Wherever one body comes into constant contact with another, it is subjected to modifying influences which differentiate its periphery from its interior, lend it a transitional character, make of it a penumbra between light and shadow. The modifying process goes on persistently with varying force and creates a shifting, changing border zone which, from its nature, cannot be delimited. For convenience' sake, we adopt the abstraction of a boundary line; but the reality behind this abstraction is the important thing in anthropogeography.

All so-called boundary lines with which geography has to do have this same character,—coastlines, river margins, ice or snow lines, limits of vegetation, boundaries of races or religions or civilizations, frontiers of states. They are all the same, stamped by the eternal flux of nature. Beyond the solid ice-pack which surrounds the North Pole is a wide girdle of almost unbroken drift ice, and beyond this is an irregular concentric zone of scattered icebergs which varies in breadth with season, wind and local current; a

persistent decrease in continuity from solid pack to open sea. The line of perpetual snow on high mountains advances or retreats from season to season, from year to year; it drops low on chilly northern slopes and recedes to higher altitudes on a southern exposure; sends down long icy tongues in dark gorges, and leaves outlying patches of old snow in shaded spots or beneath a covering of rock waste far below the margin of the snow fields.

In the struggle for existence in the vegetable world, the tree line pushes as far up the mountain as conditions of climate and soil will permit. Then comes a season of fiercer storms, intenser cold and invading ice upon the peaks. Havoc is wrought, and the forest drops back across a zone of border warfare—for wars belong to borders—leaving behind it here and there a dwarfed pine or gnarled and twisted juniper which has survived the onslaught of the enemy. Now these are stragglers in the retreat, but are destined later in milder years to serve as outposts in the advance of the forest to recover its lost ground. Here we have a border scene which is typical in nature—the belt of unbroken forest growing thinner and more stunted towards its upper edge, succeeded by a zone of scattered trees, which may form a cluster perhaps in some sheltered gulch where soil has collected and north winds are excluded, and higher still the whitened skeleton of a tree to show how far the forest once invaded the domain of the waste.

The habitable area of the earth everywhere shows its boundaries to be peripheral zones of varying width, now occupied and now deserted, protruding or receding according to external conditions of climate and soil, and subject to seasonal change. The distribution of human life becomes sparser from the temperate regions towards the Arctic Circle, foreshadowing the unpeopled wastes of the ice-fields beyond. The outward movement from the tropics poleward halts where life conditions disappear, and there finds its boundary; but as life conditions advance or retreat with the seasons, so does that boundary. On the west coast of Greenland the Eskimo village of Etah, at about the seventy-eighth parallel, marks the northern limit of permanent or winter settlement; but in summer the Eskimo, in his kayak, follows the musk-ox and seal much farther north and there leaves his igloo to testify to the wide range of his poleward migration. Numerous relics of the Eskimo and their summer encampments have been found along Lady Franklin Bay in northern Grinnell Land ($81^{\circ} 50' \text{ N. L.}$), but in the interior, on the outlet stream of Lake Hazen, explorers have discovered remains of habitations which had evidently, in previous ages, been perma-

nently occupied.* The Murman Coast of the Kola Peninsula has, in summer, a large population of Russian fishermen and forty or more fishing stations; but when the catch is over at the end of August, and the Arctic winter approaches, the stations are closed, and the three thousand fishermen return to their permanent homes on the shores of the White Sea.†

An altitude of about five thousand feet marks the limit of village life in the Alps; but during the three warmest months of the year, the summer pastures at eight thousand feet or more are alive with herds and their keepers. The boundary line of human life moves up the mountains in the wake of spring and later hurries down again before the advance of winter. The Himalayan and Karakorum ranges show whole villages of temporary occupation, like the summer trading town of Gartok at 15,000 feet on the caravan route from Leh to Lhasa, or Shahidula (3,285 meters or 10,925 feet) on the road between Leh and Yarkand;‡ but the boundary of permanent habitation lies several thousand feet below. Comparable to these are the big hotels that serve summer stage-coach travel over the Alps and Rockies, but which are deserted when the first snow closes the passes. Here a zone of altitude, as in the polar regions a zone of latitude, marks the limits of the habitable area.

Such boundaries mark the limits of that movement which is common to all animate things. Every living form spreads until it meets natural conditions in which it can no longer survive, or until it is checked by the opposing expansion of some competing form. If there is a change either in the life conditions or in the strength of the competing forms, the boundary shifts. In the propitious climate of the Genial Period, plants and animals lived nearer to the North Pole than at present; then they fell back before the advance of the ice sheet. The restless surface of the ocean denies to man a dwelling place; every century, however, the Dutch are pushing forward their northern boundary by reclamation of land from the sea; but repeatedly they have had to drop back for a time when the water has again overwhelmed their hand-made territory. The boundaries of race and state which are subject to greatest fluctuations are those determined by the resistance of other peoples. The westward sweep of the Slavs prior to the 8th century carried them beyond the Elbe; but as the Germans increased in numbers, outgrew their narrow ter-

* A. W. Greely, Report of the Lady Franklin Bay Expedition, Vol. 1, pp. 28-33, 236. Misc. Doc. No. 393. Washington, 1888.

† A. P. Engelhardt, *A Russian Province of the North*, pp. 123-130. Translated from the Russian, London, 1899.

‡ Col. Francis E. Younghusband, *The Heart of a Continent*, pp. 194-199. London, 1904.

ritories and inaugurated a counter-movement eastward, the Slavs began falling back to the Oder, to the Vistula, and finally to the Niemen. Though the Mohawk valley opened an easy avenue of expansion westward for the early colonists of New York, the advance of settlements up this valley for several decades went on at only a snail's pace, because of the compact body of Iroquois tribes holding this territory, while in the unoccupied land farther south between the Cumberland and Ohio rivers the frontier went forward with leaps and bounds, pushed on by the expanding power of the young Republic.

Anything which increases the expanding force of a people—the establishment of a more satisfactory government by which the national consciousness is developed, as in the American and French revolutions, the prosecution of a successful war by which popular energies are released from an old restraint, mere increase of population, or an impulse communicated by some hostile and irresistible force behind—all are registered in an advance of the boundary of the people in question and a corresponding retrusion of their neighbour's frontier.

The border district is the periphery of the growing or declining race or state. It runs the more irregularly, the greater are the variations in the external conditions as represented by climate, soil, barriers, and natural openings, according as these facilitate or obstruct advance. When it is contiguous with the border of another state or race, the two form a wide zone in which ascendancy from one side or the other is being established. The boundary fluctuates, for equilibrium of the contending forces is established rarely and for only short periods. The more aggressive people throws out across this debatable zone, along the lines of least resistance or greatest attraction, long streamers of occupation; so that the frontier takes on the form of a fringe of settlement, whose interstices are occupied by a corresponding fringe of the displaced people. Such was its aspect in early colonial America, where population spread up every fertile river valley across a zone of Indian land; and such it is in northern Russia to-day, where long narrow Slav bands run out from the area of continuous Slav settlement across a wide belt of Mongoloid territory to the shores of the White Sea and Arctic Ocean.*

The border zone is further broadened by the formation of ethnic islands beyond the base line of continuous settlement, which then advances more or less rapidly, if expansion is unchecked, till it coalesces with these outposts, just as the forest line on the moun-

* Anatole Leroy-Beaulieu, *The Empire of the Tzars*, Vol. 1, *Ethnographical Map*. New York, 1893.

tains may reach, under advantageous conditions, its farthest outlying tree. Such ethnic peninsulas and islands we see in the early western frontiers of the United States from 1790 to 1840, when that frontier was daily moving westward.*

The breadth of the frontier zone is indicative of the activity of growth on the one side and the corresponding decline on the other, because extensive encroachment in the same degree disintegrates the territory of the neighbour at whose cost such encroachment is made. A straight, narrow race boundary, especially if it is nearly coincident with a political boundary, points to an equilibrium of forces which means, for the time being at least, a cessation of growth. Such boundaries are found in old, thickly populated countries, while the wide, ragged border zone belongs to new, and especially to colonial, peoples. In the oldest and most densely populated seats of the Germans, where they are found in the Rhine valley, the boundaries of race and empire are straight and simple; but the younger, eastern border, which for centuries has been steadily advancing at the cost of the unequally matched Slavs, has the ragged outline and sparse population of a true colonial frontier. Between two peoples who have had a long period of growth behind them, the oscillations of the boundary decrease in amplitude, as it were, and finally approach a state of rest. Each people tends to fill out its area evenly; every advance in civilization, every increase of population, increases the stability of their tenure, and hence the equilibrium of the pressure upon the boundary. Therefore, in such countries, racial, linguistic and cultural boundaries tend to become simpler and straighter.

The growth is more apparent, or, in other words, the border zone is widest and most irregular, where a superior people intrudes upon the territory of an inferior race. Such was the broad zone of thinly scattered farms and villages amidst a prevailing wilderness and hostile Indian tribes which, in 1810 and 1820, surrounded our trans-Allegheny area of continuous settlement in a one to two hundred mile wide girdle. Such has been the wide, mobile frontier of the Russian advance in Siberia and until recently in Manchuria, which aimed to include within a dotted line of widely separated railway guard stations, Cossack barracks, and penal colonies, the vast territory which later generations were fully to occupy. Similar, too, is the frontier of the Dutch and English settlements in South Africa, which has been pushed forward into the Kaffir country—a broad belt of scattered cattle ranches and isolated mining hives, dropped down amidst Kaffir hunting and grazing lands. Broader still was that shadowy

* Eleventh Census of the United States, Population, Part I, maps on pp. xviii-xxiii.

belt of American occupation which for four decades immediately succeeding the purchase of Louisiana stretched in the form of isolated fur-stations, lonely trappers' camps, and shifting traders' *rendezvous* from the Mississippi to the western slope of the Rockies and the northern watershed of the Missouri, where it met the corresponding nebulous outskirts of the far-away Canadian state on the St. Lawrence River.

The untouched resources of such new countries tempt to the widespread superficial exploitation, which finds its geographical expression in a broad, dilating frontier. Here the man-dust which is to form the future political planet is thinly disseminated, swept outward by a centrifugal force. Furthermore, the absence of natural barriers which might block this movement, the presence of open plains and river highways to facilitate it, and the predominance of harsh conditions of climate or soil rendering necessary a savage, extensive exploitation of the slender resources, often combine still further to widen the frontier zone. This was the case in French Canada and till recent decades in Siberia, where intense cold and abundant river highways stimulated the fur trade to the practical exclusion of all other activities, and substituted for the closely-grouped, sedentary farmers with their growing families the wide-ranging trader with his Indian or Tunguse wife and his half-breed offspring. Under harsh climatic conditions, the fur trade alone afforded those large profits which every infant colony must command in order to survive; and the fur trade meant a wide frontier zone of scattered posts amidst a prevailing wilderness. The French in particular, by the possession of the St. Lawrence and Mississippi Rivers, the greatest systems in America, were lured into the danger of excessive expansion, attenuated their ethnic element, and failed to raise the economic status of their wide border district, which could therefore offer only slight resistance to the spread of solid English settlement.* Yet more recently, the chief weakness of the Russians in Siberia and Manchuria—apart from the corruption of the national government—was the weakness of a too remote and too sparsely populated frontier, and of a people whose inner development had not kept pace with their rate of expansion.

Wasteful exploitation of a big territory is easier than the economical development of a small district. This is one line of least resistance which civilized man as well as savage instinctively follows, and which explains the tendency towards excessive expansion characteristic of all primitive and nascent peoples. For such peoples

*Fully treated in E. C. Semple, *American History and Its Geographic Conditions*, pp. 22-31. Boston, 1903.

natural barriers which set bounds to this expansion are of vastly greater importance than they are for mature or fully developed peoples. The reason is this: the boundary is only the expression of the outward movement or growth, which is nourished from the same stock of race energy as is the inner development. Either carried to an excess weakens or retards the other. If population begins to press upon the limits of subsistence, the acquisition of a new bit of territory obviates the necessity of applying more work and more intelligence to the old area, to make it yield subsistence for the growing number of mouths; the stimulus to adopt better economic methods is lost. Therefore, natural boundaries drawn by mountain, sea and desert, serving as barriers to the easy appropriation of new territory, have for such peoples a far deeper significance than the mere determination of their political frontiers by physical features, or the benefit of protection.

The land with the most effective geographical boundaries is a naturally defined region like Corea, Japan, Australia, Egypt, Italy, Spain, France or Great Britain—a land characterized not only by exclusion from without through its encircling barriers, but also by the inclusion within itself of a certain compact group of geographic conditions, to whose combined influences the inhabitants are subjected and from which they cannot readily escape. This aspect is far more important than the mere protection which such boundaries afford. They are not absolutely necessary for the development of a people, but they give it an early start, accelerate the process, and bring the people to an early maturity; they stimulate the exploitation of all the local geographic advantages and resources, the formation of a vivid tribal or national consciousness and purpose, and concentrate the national energies when the people is ready to overleap the old barriers. The early development of island and peninsula peoples and their attainment of a finished ethnic and political character are commonplaces of history. The stories of Egypt and Greece, of Great Britain and Japan, illustrate the stimulus to maturity which emanates from such confining boundaries. The wall of the Appalachians narrowed the westward horizon of the early English colonies in America, guarded them against the excessive expansion which was undermining the French dominion in the interior of the continent, set a most wholesome limit to their aims, and thereby intensified their utilization of the narrow land between mountains and sea. France, with its limits of growth indicated by the Mediterranean, Pyrenees, Atlantic, Channel, Vosges, Jura and Maritime Alps, found its period of adolescence shortened and, like Great Britain, early

reached its maturity. Nature itself set the goal of its territorial expansion, and by crystallizing the political ideal of the people, made that goal easier to reach, just as the dream of "United Italy" realized in 1870 had been prefigured in contours drawn by Alpine range and Mediterranean shore-line.

The area which a race or people occupies is the resultant of the expansive force within and the obstacles without, either physical or human. Insurmountable physical obstacles are met where all life conditions disappear, as on the borders of the habitable world where man is separated from the unpeopled wastes of polar ice fields and unsustaining oceans. The frozen rim of arctic lands, the coastline of the continents, the outermost arable strip on the confines of the desert, the barren or ice-capped ridge of high mountain range, are all such natural boundaries which set more or less absolute limits to the movement of peoples and the territorial growth of states. The sea is the only absolute boundary, because it alone blocks the continuous, unbroken expansion of a people. When the Saxons of the lower Elbe spread to the island of Britain, a band of unpeopled sea separated their new settlements from their native villages on the mainland. Even the most pronounced land barriers, like the Himalayas and Hindu Kush, have their passways and favoured spots for short summer habitation where the people from the opposite slopes meet and mingle for a season. Sandy wastes are hospitable at times. When the spring rains on the mountains of Abyssinia start a wave of moisture lapping over the edges of the Nubian desert, it is immediately followed by a tide of Arabs with their camels and herds, who make a wide zone of temporary occupation spread over the newly created grassland, but who retire in a few weeks before the desiccating heat of summer.*

Nevertheless, all natural features of the earth's surface which serve to check, retard or weaken the expansion of peoples, and therefore hold them apart, tend to become racial or political boundaries; and all present a zone-like character. The wide ice-fields of the Scandinavian Alps were an unpeopled waste long before the political boundary was drawn along it. "It has not in reality been a definite natural *line* that has divided Norway from her neighbour on the east; it has been a *band* of desert land, up to hundreds of miles in width. So utterly desolate and apart from the area of continuous habitation has this been, that the greater part of it, the district north of Trondhjem, was looked upon even as recently as the last century as a common district. Only nomadic Lapps wandered about in it,

* Sir S. W. Baker; *The Nile Tributaries of Abyssinia*, pp. 88, 128-129, 135. Hartford, 1868.

sometimes taxed by all three countries. A parcelling out of this desert common district was not made toward Russia until 1826. Towards Sweden it was made in 1751.”*

Any geographical feature which, like this, presents a practically uninhabitable area, forms a scientific boundary, not only because it holds apart the two neighbouring peoples and thereby reduces the contact and friction which might be provocative of hostilities, but also because it lends protection against attack. This motive, as also the zone character of all boundaries, comes out conspicuously in the artificial border wastes surrounding primitive tribes and states in the lower status of civilization. The early German tribes depopulated their borders in a wide girdle, and in this wilderness permitted no neighbours to reside. The width of this zone indicated the valour and glory of the state, but was also valued as a means of protection against unexpected attack.† Similarly Xenophon found that the Armenian side of the river Kentrites, which formed the boundary between the Armenian plains and the highlands of Karduchia, was unpeopled and destitute of villages for a breadth of fifteen miles, from fear of the marauding Kurds.‡ In the eastern Sudan, especially in that wide territory along the Nile-Congo watershed occupied by the Zandeh, Junker found the frontier wilderness a regular institution owing to the exposure of the border districts in the perennial intertribal feuds.§ The vast and fertile region defined by the Ohio and Tennessee rivers, lay as a debatable border between the Algonquin Indians of the north and the Appalachians of the south. Both claimed it, both used it for hunting, but neither dared dwell therein.|| Similarly the Cherokees had no definite understanding with their savage neighbours as to the limits of their respective territories. The effectiveness of their claim to any particular tract of country usually diminished with every increase of its distance from their villages. The consequence was that a considerable strip of territory between the settlements of two tribes, Cherokees and Creeks for instance, though claimed by both, was practically considered neutral ground and the common hunting ground of both.¶ The Creeks, whose most western villages from 1771 to 1798 were

* Norway, Official Publication for the Paris Exhibition, 1900, pp. 3-4 and map. Christiania, 1900.

† Cæsar, *De Bello Gallico*, Book IV, Chap. 3, and Book VI, Chap. 23.

‡ Grote, *History of Greece*, Vol. IX, Chap. 70, pp. 99, 115. New York, 1859.

§ Dr. Wilhelm Junker, *Travels in Africa*, pp. 18, 45, 79, 87, 115, 117, 138, 191, 192, 200, 308, 312, 325, 332. Translated from the German. London, 1892.

|| Theodore Roosevelt, *The Winning of the West*, Vol. 1, pp. 50, 70, 135. New York, 1895.

¶ C. C. Royce, *The Cherokee Nation of Indians*, p. 140. Fifth Annual Report of the Bureau of Ethnology. Washington, 1884.

located along the Coosa and upper Alabama rivers,* were separated by 300 miles of wilderness from the Chickasaws to the northwest, and by a 150-mile zone from the Choctaws. The most northern Choctaw towns, in turn, lay 160 miles to the south of the Chickasaw nation, whose compact settlements were located on the watershed between the western sources of the Tombigby and the head stream of the Yazoo.† The wide intervening zone of forest and canebrake was hunted upon by both nations.‡

Sometimes the border is preserved as a wilderness by formal agreement. A classic example in this case is found in the belt of untenanted land, fifty to ninety kilometers wide, which China and Korea once maintained as their boundary. No settler from either side was allowed to enter and all travel across the border had to use a single passway, where three times annually a market was held.§ On the Russo-Mongolian border south of Lake Baikal, the town of Kiakhtha, which was established in 1688 as an entrepôt of trade between the two countries, is occupied in its northern half by Russian factories and in its southern by the Mongolian-Chinese quarters, while between the two is a neutral space devoted to commerce.||

These border wastes do not always remain empty, however, even when their integrity is respected by the two neighbouring tribes whom they serve to divide; alien races often intrude into their unoccupied reaches. The boundary wilderness between the Sudanese states of Wadai and Dar Fur harbours several semi-independent villages whose insignificance is a guarantee of their safety from conquest. Similarly in the wide border district between the Creeks on the east and the Choctaws on the west were found typical small, detached tribes—the Chatots and Thomez of forty huts each on the Mobile River, the Tensas tribe with a hundred huts on the Tensas River, and the Mobilians near the confluence of the Tombigby and Alabama.¶ Along the desolate highland separating Norway and Sweden the nomadic Lapps, with their reindeer herds, have penetrated southward to 62° North Latitude, reinforcing the natural barrier by another barrier of alien race. From this point southward, the coniferous forests begin and continue the border waste in

* Albert J. Pickett, *History of Alabama*, pp. 79–89, 113–115. 1851. Reprint, Birmingham, 1900.
James Adair, *History of American Indians*, p. 257. London, 1775.

† *Ibid.*, pp. 282, 352–3.

‡ Albert J. Pickett, *History of Alabama*, pp. 133–135. 1851. Reprint, Birmingham, 1900.

§ Archibald Little, *The Far East*, p. 249. Oxford, 1905.

¶ M. Huc, *Travels in Tartary, Thibet and China*, 1844–1846, Vol. 1, p. 74. Translated from the French. Reprint. Chicago, 1898.

¶ Albert J. Pickett, *History of Alabama*, pp. 118–119. 1857. Reprint, Birmingham, 1900.

the form of a zone some sixty miles wide; this was unoccupied till about 1600, when into it slowly filtered an immigration of Finns, whose descendants to-day constitute an important part of the still thin population along the frontier to the heights back of Christiania. Only thirty miles from the coast does the border zone between Norway and Sweden, peopled chiefly by intruding foreign stocks, Lapps and Finns, contract and finally merge into the denser Scandinavian settlements.*

Where the border waste offers favourable conditions of life and the intruding race has reached a higher status of civilization, it multiplies in this unpeopled tract and soon spreads at the cost of its less advanced neighbours. The old No Man's Land between the Ohio and Tennessee was a line of least resistance for the expanding Colonies, who here poured in a tide of settlement between the northern and southern Indians, just as later other pioneers filtered into the vague border territory of weak tenure between the Choctaws and Creeks, and there on the Tombigby, Mobile and Tensas rivers, formed the nucleus of the State of Alabama.†

This untenanted hem of territory surrounding so many savage and barbarous peoples reflects their superficial and unsystematic utilization of their soil, by reason of which the importance of the land itself and the proportion of population to area are greatly reduced. It is a part of that uneconomic and extravagant use of the land, that appropriation of wide territories by small tribal groups, that characterizes the lower stages of civilization, as opposed to the exploitation of every square foot for the support of a teeming humanity, which marks the oldest and most advanced states. Each stage puts its own valuation upon the land according to the return from it which each expects to get. The low valuation is expressed in the border wilderness, by which a third or even a half of the whole area is wasted; and also in the readiness with which savages will often sell their best territory for a song.

For the same reason they leave their boundaries undefined; a mile nearer or farther, what does it matter? Moreover, their fitful or nomadic occupation of the land leads to oscillations of the frontiers with every attack from without and every variation of the tribal strength within. Their unstable states rarely last long enough in a given form or size to develop fixed boundaries; hence, the vagueness as to the extent of tribal domains among all savage peoples, and the conflicting land claims which are the abiding source of

* Norway, Official Publication for the Paris Exhibition, pp. 5, 83-84. Christiania, 1900.

† Albert J. Pickett, *History of Alabama*, pp. 416, 417, 461, 467. 1857. Reprint, Birmingham, 1900.

war. Owing to these overlapping boundaries—border districts claimed but not occupied—the American colonists met with difficulties in their purchase of land from the Indians, often paying twice for the same strip.

Even civilized peoples may adopt a waste boundary where the motive for protection is peculiarly strong, as in the half-mile neutral zone of lowland which ties the rock of Gibraltar to Spain. On a sparsely populated frontier, where the abundance of land reduces its value, they may throw the boundary into the form of a common district, as in the vast, disputed Oregon country, accepted provisionally as a district of joint occupancy between the United States and Canada from 1818 to 1846, or that wide highland border which Norway so long shared with Russia and Sweden. But such are only temporary phases in the evolution of a political frontier from wide, neutral border to the mathematically determined boundary line required by modern civilized states.

(Conclusion in the BULLETIN for August.)

GEOGRAPHIC INFLUENCE ON THE ECONOMIC HISTORY OF VIRGINIA.

BY

G. T. SURFACE.

The desire of gain, ambition for personal notoriety, and relief from religious or political oppression are the three important stimuli which have led to the discovery and occupancy of new territory. Each of these figured in the discovery and colonization of America. The commercial prompting predominated, since the great end to be achieved was the discovery of a shorter route to the South Sea, which would make the Indian trade more accessible. Whatever causes may have led to founding the Spanish settlements of the South, and later the Puritan settlements of New England, it is evident that the prospect of financial reward was the chief incentive which led to the settlement of that part of the American continent known as Virginia.

The expedition of Sir Humphrey Gilbert having proved a failure, Sir Walter Raleigh—his half brother—secured the patent renewed to himself, March 26th, 1584, and sailed April 27th from the west